

R. F. HOPPER.
HYPODERMIC NEEDLE MOUNT.
APPLICATION FILED MAR. 4, 1915.

1,139,975.

Patented May 18, 1915.

Fig. 1.

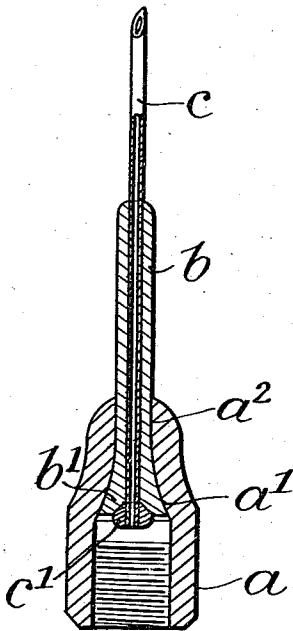


Fig. 3.

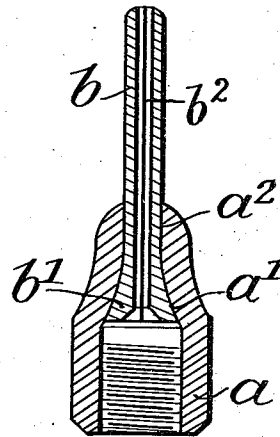


Fig. 2.

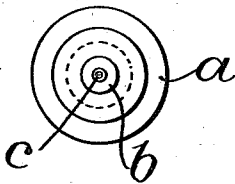
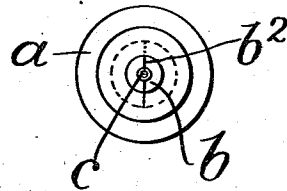


Fig. 4.



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UNITED STATES PATENT OFFICE.

REGINALD F. HOPPER, OF ST. ALBANS, ENGLAND.

HYPODERMIC-NEEDLE MOUNT.

1,139,975.

Specification of Letters Patent.

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Application filed March 4, 1915. Serial No. 12,112.

To all whom it may concern:

Be it known that I, REGINALD FLEET HOPPER, a subject of the King of Great Britain, residing at St. Albans, in the county of Herts, England, have invented certain new and useful Improvements in Hypodermic-Needle Mounts, of which the following is a specification.

Hypodermic needle mounts usually consist of an internally screw-threaded mount or cap having a projecting tube or nozzle which is integral therewith. The hypodermic needle, which has a soft metal head, is passed through the tube or nozzle from the interior of the cap, and the soft metal head rests against the inner end of the tube or nozzle.

It frequently happens that the needle sticks fast in the tube or nozzle, and when an attempt is made to push the needle out of the tube or nozzle, it is broken off flush with the end of the tube or nozzle. The needle may also be broken in some other manner. Under such circumstances the needle cannot be removed and it is necessary to renew the cap and tube or nozzle.

The object of the present invention is to construct an improved hypodermic needle mount enabling a broken needle to be more readily removed from the tube or nozzle and should it be impossible to remove the needle it will only necessitate the renewal of the tube or nozzle as this latter is detachable from the cap.

The invention is illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal section of the improved hypodermic needle mount and Fig. 2 is a plan thereof. Fig. 3 is a longitudinal section showing a modification, the needle being omitted, and Fig. 4 is a plan of the same but showing the needle.

a is the mount, which is screw-threaded internally to be screwed onto the end of the syringe, as usual. The mount a has a suitable seating at a' and a cylindrical aperture a^2 to receive and securely hold the detachable tube or nozzle b . This latter has an enlargement b' which accurately fits against the seating a' . The other part of the tube or nozzle b accurately fits the cylindrical aperture a^2 .

The needle c , provided with the usual soft metal head c' , is passed through the tube or nozzle b from the interior of the mount a and its soft metal head fits against the inner end of the tube b . Should the needle c be broken, pressure can be applied to the outer end of the tube or nozzle b to force this latter out of the mount a . When this is removed the soft head c' can be readily held by a pair of pincers and generally the needle c can be withdrawn from the tube or nozzle b . It will be understood that the soft head c' cannot readily be gripped when the parts a and b are fixed together as the screw-threaded portion of the mount a is too small to allow a pair of pincers to be inserted. Should it be impossible to remove the needle c it is only necessary to renew the tube b , which will cost less than a combined mount and tube made integral. If desired the tube b may be split longitudinally at b^2 as shown in Figs. 3 and 4 to enable the needle c to be more readily removed when the tube b has been removed from the mount a .

What I claim is:—

1. In a hypodermic needle mount, the combination of a cap having an aperture therein, a suitable seating in said cap, a detachable tube provided with an enlargement to accurately fit against the said seating and within the said aperture, a hypodermic needle fitting within the detachable tube, and a soft metal head on said needle fitting against the inner end of said detachable tube, substantially as set forth.

2. In a hypodermic needle mount, the combination of a cap having an aperture therein, a seating in said cap, a longitudinally split detachable tube, an enlargement on said tube accurately fitting against the said seating and within the said aperture, a hypodermic needle fitting within the detachable tube, and an enlargement upon said needle fitting against the inner end of said detachable tube, substantially as set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

REGINALD F. HOPPER.

Witnesses:

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